

**Report on the Third Meeting of the Steering Committee for the  
International Action Plan on Occupational Radiation Protection  
(IAPORP)**

**28 – 30 January 2008**

**TM-29071**

**IAEA Headquarters, Vienna**

## **Background**

The first International Conference on Occupational Radiation Protection was held in Geneva from 26 to 30 August 2002. It was organized by the IAEA, which convened the Conference jointly with the International Labour Office (ILO). It was co-sponsored by the European Commission (EC) and held in cooperation with the World Health Organization (WHO) and OECD Nuclear Energy Agency (NEA) and a number of other international organizations. The Conference produced a number of important findings and recommendations. These were considered in September 2002 by the IAEA General Conference, which requested the IAEA's Director General, in cooperation with the ILO and other relevant bodies, to formulate and implement an action plan.

The IAEA and ILO prepared a draft that was reviewed by the organizations and key participants involved in the Geneva Conference as well as by the International Confederation of Free Trade Unions (ICFTU) and the International Organisation of Employers (IOE). The Action Plan was approved by the IAEA Board of Governors on 8 September 2003. In order to ensure the successful implementation of the Action Plan, the IAEA and ILO agreed to establish a Steering Committee (SC) with the overall remit to advise on, monitor and assist in the practical implementation of the International Action Plan (IAP). The First and Second Meetings of the Steering Committee were held in Vienna on 4-6 February 2004 and 25-27 January 2006 respectively.

## **Summary**

The Third Meeting of the Steering Committee was held in Vienna, 28-30 January 2008. Twenty-two participants attended the meeting (see Appendix 1). The first one and half days consisted of oral presentations, by IAEA, ILO and WHO representatives, on the status of each action (1 up to 14) of the IAP. Time was allowed for discussions on each of them. The last two half days were devoted to discussing a table presenting the main conclusions and recommendations of the Steering Committee concerning the present status of each action as well as of the Action Plan as a whole. The activities of four actions, namely Actions 1, 2, 4, 9 were considered as completed and their output to be integrated into the regular activities of the Agencies. The activities of five actions, namely Actions 3, 5, 6, 13, 14 were considered as completed but with a need for implementing specific follow up actions. Five actions, namely Actions 7, 8, 10, 11, 12 were considered as still in progress. With this in mind, the Steering Committee decided that the Action Plan should continue for another one or two years to permit the pending actions to be completed. The meeting gave also the opportunity to the Agency and the European Commission to describe the present status of the International and European BSS revisions and to present the programme and contents of the EUTERP Platform to the participants.

## **A. Report**

## **A.1. Welcome address**

E. Amaral welcomed the participants on behalf of the IAEA, and stressed that the meeting was an opportunity for evaluating the Action Plan as a whole, discussing its future as well as new possible activities. She also presented the new organisation of her Division, the Radiation Transport and Waste Safety Division (NSRW), which implies that the co-secretariat of the IAPORP now belongs to the Radiation Safety and Monitoring Section headed by R. Czarwinski (see appendix 2).

S. Niu presented his wishes for a very constructive and fruitful discussion on behalf of the ILO. He also thanked the Agency for its cooperation and commitment with regards to the Action Plan.

P. Deboodt introduced C. Lefaire as the Rapporteur for the meeting.

### **A.1.1. Approval of the meeting agenda**

The draft agenda presented by P. Deboodt was approved without any modification (see appendix 3).

### **A.1.2. Approval of the report of the 2<sup>nd</sup> meeting**

The report has been examined, action by action, by the Steering Committee; no real comments were provided but three editorial remarks were made which will be taken into account. The report has therefore been approved and the Steering Committee members considered it as excellent and reflecting the discussions and recommendations from the previous meeting very well.

## **A.2. Status of each action**

Following a proposal from R. Czarwinski, the chairmanship was given to H. Landfermann.

Concerning all actions, and in particular actions 1 to 5, 12 and 14, the Steering Committee noted that, in order to favour harmonisation, cooperation has been strengthened between the IAEA and ILO since the Geneva Conference and the setting up of the IAPORP. The Steering Committee recommended, whatever the future status of the Action Plan, that such cooperation should continue on a regular basis, in particular for the continuation of action 1.

### ***Action 1: ILO, supported by the IAEA, to take steps to further promote the ratification and implementation of ILO Convention 115 (S.NIU)***

#### ***Presentation***

S. Niu reminded the meeting that while the ILO is a co-sponsor of many IAEA standards, it has its own main mechanism based on Conventions (190 up to date), which are, in the IAP context, Convention No. 115 (1960) and Recommendation No. 114 (1957). 47 countries have ratified convention No. 115 so far. Practical guidance is provided through the Code of Practice or Guidelines. The Code of Practice was prepared in the 1980's and its updating is the subject of action 4. S. Niu noted that there is still a need for further fostering ratification. He informed the Steering Committee that the Member States have to submit a report on the implementation of the fundamental Conventions every two years and every five years for the other Conventions such as Convention 115. In that

context, the 2006 and 2007 International Labour Conferences in June examined reports<sup>1, 2</sup> from the Committee of Experts on the Application of Conventions and Recommendations (CEACR). These reports include the observations of the CEACR on the applications of Convention No. 115 and Recommendation No. 114 based on country information and reports submitted to the ILO in 2005 and 2006 respectively (see appendix 4 which lists the countries which have provided reports).

S. Niu pointed out that it has been and still is a common practice for the IAEA to be routinely consulted by the CEACR in its examination of the information and reports from the Member States concerning the application of Convention No 115 and Recommendation No. 114. He also said that since the last Steering Group, the ILO has provided the Agency with material, in particular slides, as support for promoting the ratification and implementation of Convention 115.

### ***Discussion***

P. Deboodt and R. Suarez observed that the Agency had regularly made use of the material provided by the ILO for promoting Convention No. 115 and Recommendation 114 during regional meetings, in particular through its TC projects for Agency Member States, as well as through ORPAS appraisals. These events provided opportunities to present the Convention when needed and to check its level of implementation.

Several participants (V. Hohalan, S. Mundigl, J. V der Steen) proposed that the action be closed, as all the intended and planned activities had been completed. However the representatives of both the ILO and IAEA considered this premature as a lot of countries are still not familiar with the Convention and more efforts to promote it could be envisaged by making use of all the Thematic safety Area 2 programme activities. It was also suggested that the database of contact points (see Action 5 hereafter) be employed as a channel for that promotion.

### ***Conclusions***

The Steering Committee noted that the ILO had provided ad hoc information to the Agency allowing the systematic promotion of ILO Convention 115 and recommendation 114 during “technical” regional meetings and appraisals such as ORPAS.

The Steering Committee considered the planned activities of Action 1 as completed.

The Steering Committee recommended that the promotion of the ratification and implementation of Convention 115 and Recommendation 114 should be continued by the ILO unceasingly through its regular procedures and the IAEA within its technical regional meetings and further developed through other activities under the Thematic Safety Area 2 on occupational radiation protection. Therefore the Steering Committee recommended that the cooperation between the ILO and IAEA be further enhanced within their regular activities.

***Action 2: ILO to consider whether there is a need to review the procedures for requesting from Member States information on the implementation of ILO Convention 115 and to review the types of information being requested, so that peer reviews of occupational radiation protection***

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<sup>1</sup> <http://www.ilo.org/public/english/standards/relm/ilc/ilc95/pdf/rep-iii-1a.pdf>

<sup>2</sup> <http://www.ilo.org/public/english/standards/relm/ilc/ilc96/pdf/rep-iii-1a.pdf>

***programmes become more effective. Lessons learned from the application of the reporting criteria applied under the Convention on Nuclear Safety (IAEA document INFCIRC/449) may be a useful input.***

***Presentation***

S. Niu presented the procedures existing at the ILO for requesting information from Member States on the implementation of the ILO Convention 115.

***Discussion***

T. Zodiates pointed out that there IAEA procedures to collect information on the BSS implementation in the Member States also existed. He suggested that it should be used for checking ILO Convention 115 implementation. R. Suarez confirmed that, even if not through formal mechanisms and procedures, the IAEA performs such checking as part of the ORPAS services; he also stated that the exchanges on these results with the ILO should be more developed in the future.

***Conclusions***

The Steering Committee noted that the ILO has considered the procedures for requesting information from Member States on implementation of Convention 115, and that the Agency has provided support to this by establishing a review program.

The Steering Committee considered the planned activities of Action 2 as completed.

***Action 3: The IAEA and ILO to continue to cooperate in the development of guidance and information material that will assist in the interpretation of requirements set out in conventions and standards, and in the conduct of further IAEA intercomparison of monitoring methods for assessing occupational exposure***

***Presentation***

S. Niu presented the on-going cooperation between the Agencies for the development of Guidance, in particular through reviewing the ILO Code of Practice “Radiation Protection of Workers”. R. Suarez presented the status of the inter-comparison program; he said that many inter-comparisons had already been performed but that inter-comparisons related to measurements and monitoring techniques remained to be performed in the future.

***Discussion***

R. Czarwinski pointed out that Action 3 falls under the ILO with help from the Agency, and that these organisations work together very well, in particular on the revision of the BSS and other documents where guidance will be made available.

***Conclusions***

The Steering Committee noted that the ILO, IAEA and other international organisations are collaborating on the revision of the BSS, which is intended to continue as a joint publication. The Steering Committee supported the ILO in cooperation with the IAEA to jointly prepare guidance and information material to assist in the interpretation of the convention 115.

The Steering Committee noted that some inter-comparisons are now finished and that others related to measurements and monitoring techniques are included in Technical Cooperation projects for the current and upcoming project cycles.

The Steering Committee considered the planned activities of Action 3 as completed but with follow up actions, which will consist of:

-new inter-comparisons to be implemented within the current and upcoming TC project cycles.

**Action 4: *ILO, in consultation with the IAEA, to consider the concerns over the terminology used in the code of practice and determine the most appropriate means of addressing them.***

#### ***Presentation***

S. Niu presented the ways through which the harmonisation of terminology has been addressed.

#### ***Discussion***

No discussion took place concerning Action 4 and the Steering Committee directly endorsed the conclusions.

#### ***Conclusions***

The Steering Committee noted that the ILO has reviewed the Code of Practice. The Committee also noted that the problem of harmonising terminology had been addressed jointly with the IAEA as a result of the collaboration in revising the BSS.

The Steering Committee considered the planned activities of Action 4 as completed.

**Action 5: *ILO to make the list of contact points in its Member States and field structure available to the IAEA, which should inform the contact points about the latest available standards, guidance and advice developed at the international level and invite their representatives to relevant workshops, seminars and conferences.***

#### ***Presentation***

P. Deboodt reported to the Steering Committee that, since the last meeting, both the ILO and WHO have provided the IAEA with lists of contact persons for each Member State. Therefore a data base now exists at the Agency which provides all national contact points. P. Deboodt also mentioned that up to now no use has been made of that list and that, further, each contact point does not even know the counterparts in his/her own country.

#### ***Discussion***

S. Niu and M. R. Peres stressed that, even if cooperation is very good at the international level, there are big “gaps” at national levels and, in particular, many contact points are not at all familiar with the subject of occupational radiological protection. All actions encouraging that cooperation should have been envisaged and implemented. D. Wymer pointed out that, as far the database is concerned, what is now needed is a routine or a mechanism for informing the contact points about the latest available standards, guidance and advice developed at the international level and inviting their representatives to relevant workshops, seminars and conferences.

It was then suggested that opportunity should be taken to invite all contact points to regional cooperation meetings and other regional or international activities and to develop closer contacts between them.

S. Mundigl and some others drew attention to the fact that mechanisms should also be set up for regularly updating the content of the database.

### ***Conclusions***

The Steering Committee noted that a database with the national contact points from the Agency, the ILO and WHO had been set up by the Agency with the help of the ILO and WHO. The Steering Committee also noted that no use has been made of these files.

The Steering Committee considered the planned activities of Action 5 as completed but that there were follow up actions to be taken which consist in establishing routine mechanisms for:

- informing all contact points about their counterparts;
- taking advantage of regional coordination meetings and other regional and international activities (for example, network workshops, international conferences) to bring representatives of all three organisations together;
- developing common activities;
- promoting Convention 115 through that channel; and
- regularly updating the contact points database.

***Action 6: The IAEA, in consultation with ILO, to develop publicity materials in the form of posters and leaflets that target groups of workers identified as likely to benefit directly from the information provided — for example, workplace material designed to reduce the number of near misses and the risk of serious accidents***

### ***Presentation***

G. Sadagopan reminded the participants that following a consultancy meeting, the first draft of the posters had already been presented at the last meeting. Since then many comments had been received, in particular from the Steering Committee members and other experts, and the consequent revisions made and a final version presented. As requested during the last Steering Committee meeting, the Agency is now ready to start a translation process. G. Sadagopan requested advice from the Steering Committee on the following issues:

- whether there was a need for a poster concerning Nuclear Power Plants;
- whether there was a need for posters concerning NORM;
- whether a brochure should be produced;
- What languages should be used for the translations; and
- What procedure should be employed for dissemination.

### ***Discussion***

There were no objections to the proposal made by T. Zodiates that there was no need to produce a poster for the Nuclear Power Plants, as they already had their own publicity material for each identified group of workers in each national language.

H. Karita expected that one poster for the NORM area would be produced but P. Tattersal was of the opinion that the situations were so different in different NORM areas that no unique poster would suffice. D. Wymer considered that no radiological accident was actually possible in the NORM sector,

so that it would not be worthwhile developing one or several posters devoted to NORM activities similar to the other posters. After a discussion on these points, H Landfermann concluded that it was not worthwhile developing a poster on NORM.

H. Kharita requested that material be provided not only as posters but also as a leaflet; this opinion was supported by J.V der Steen, M.R. Peres and C. Lefaire. C Lefaire asked that the files be provided in a pdf format for printing both posters and leaflets. These requests were endorsed by the Steering Committee.

R. Czarwinski announced that the IAEA was ready to provide the translation into all six official languages of the Agency. M.L. Joshi pointed out that in his country there were so many languages that it would be better to leave it to the national agencies to translate the material into the appropriate languages. Both proposals were agreed to by the Steering Committee, after a statement from S Mundigl who said the EC will not translate the material into all the languages of the European Union but would leave it to the discretion of the national regulatory bodies.

R. Czarwinski described the envisaged dissemination strategy: there will be no copyright on these documents; all files will be made available on the IAEA website as free of cost downloadable pdf. All duplication of the original material should bear the IAEA and ILO logos. If, however, the material has been translated at national level, neither the IAEA nor ILO can endorse the translation and the logos should not be inserted into the translated poster or leaflet, but an inserted note should advertise that the fact that the original document was produced by the IAEA and ILO. It was also stressed that the material should not be used for any commercial purpose.

M. R Peres suggested making use of the contact points (see Action 5) for advertising the existence of the material. This was agreed on. After a long discussion, it was also agreed that the Agency would promote the material through all the existing networks such as ICRP, IRPA and ALARA, and also those networks dealing with lessons learned from incidents such as IRID and RELIR, as well as through either national societies for radiological protection or professional societies for non-destructive testing, medical physicians, medical physicists or medical radiographers or even through firms producing devices.

After a request for further discussion on the contents of the poster, it was agreed that minor comments would be made before the end of the meeting, but that it was the responsibility of other specialists to actually comment on these posters. Therefore the Steering Committee endorsed the posters as they were.

Another point was raised by V. Holahan concerning the assessment of the efficiency of the posters. R. Czarwinski answered that this was not really the task of the Agency, but mainly of the national regulatory bodies who, through inspections, would check the decrease of bad practices and, eventually, real incidents.

### ***Conclusions***

The Steering Committee noted that the final draft of the posters was now available. The Steering Committee congratulated the Agency for the excellent product. The Steering Committee took note of the proposed dissemination procedure among all contact points making use of electronic files available on the web site. The Steering Committee recommended complementary channels such as national and international professional societies as well as ALARA networks. The Steering Committee recommended that, at least, the material be translated into all official languages of the Agency. The Steering Committee recommended allowing regulatory bodies or professional societies to translate the material into other languages.

The Steering Committee considered the planned activities of Action 6 as completed but that there were some follow up actions to be made, which would consist in establishing routine mechanisms for:

- finalising the posters;
- providing them in a leaflet or brochure form ;
- asking for endorsement by stakeholders such as trade unions; and
- making the material available as pdf in the six official languages.

***Action 7: The IAEA to provide a focal point, on a website, where networks may be established for exchanges of information, experience and lessons learned between interested parties***

### ***Presentation***

P. Deboodt presented the policy implemented by the Agency for providing a focal point for networking: this incorporates supporting the development of networks as well as the setting up of a website. For the first activity, P Deboodt reminded the participants that the IAEA was an observer in the European ALARA Network (EAN), acted jointly with the NEA as Secretariat of the ISOE network for NPPs and, furthermore, functioned as an ISOE Technical Centre for 11 non-OECD countries. He also informed the Steering Committee that the Agency has launched two new networks: the Regional East European And Central Asian Countries (RECAN) which has already organised three workshops, and the Asian Region ALARA Network, which had its first Steering Committee last December and will organise its first workshop in Japan next November. These last two networks are financially supported by the IAEA through the Technical Cooperation and Regional Projects. The Agency is looking for motor countries to enable these networks to become self-sustainable.

As for the future, P. Deboodt said that the decision was still pending for other networks in Africa (one French speaking and one English speaking) and Latin America; and that the website had not yet been developed, however he informed the meeting that additional workforce would soon be available at the Agency to assist in the development of the website.

### ***Discussion***

H. Kharita pointed out that there was a need for a fourth new Network grouping for Middle Eastern Arabic speaking countries (more than 15 countries).

J. Van der Steen and M. Peres requested the Agency to support the setting up of these four supplementary networks as soon as possible. The Radiation Safety and Monitoring Section was advised to refer to the success of EAN and RECAN in improving radiological protection and ALARA culture in their participating countries as an argument for getting financial support from Technical Cooperation.

With respect to Latin America, B. Gregori informed the Steering Committee that an informal networking through the radiological protection national societies had existed for a long time, which included the Caribbean islands. A more formal forum, with five regulatory bodies (Mexico, Argentina, Brazil, Cuba and Spain) had been set up, but it did not focus on occupational radiological protection. However, making use of the existing informal networks, a more structured Latino American ALARA network would be welcomed. C. Lefaire proposed that the opportunity of the Buenos Aires IRPA



congress be taken to organise, either during the Congress, or just before or after, a meeting with representatives of all Latino American Countries to discuss this topic. He suggested that this might eventually be a consultancy meeting supported by the Agency.

As for the website, B. Ahier suggested that a first step be quickly taken to set up a page with a short description of the objectives and activities of each existing network and a link to the network website, as no network nowadays can exist without a website. This should cover not only ISOE, EAN, RECAN and ARAN but also IRID and RELIR.

### ***Conclusions***

The Steering Committee noted the positive feedback from the RECAN network and the setting up of the ARAN network, both supported by the Agency. The Steering Committee noted that several other regions are expecting the setting up of such networks (French and English speaking African countries, Middle East countries, Latin American countries). The Steering Committee recommended that the Agency support the setting up of such regional networks as soon as possible through Technical Cooperation and Regional Cooperation Agreements.

The Steering Committee supported the setting up and management by the Agency of a website to provide a focal point for all existing networks concerned with occupational exposure.

The Steering Committee considered Action 7 as being in progress.

The Steering Committee noted that the remaining activities were:

- the setting up of a website as a focal point;
- the introduction of the future networks into the next 2009-2011 Agency Programme; and
- the follow-up of Agency support to the existing two networks during this forthcoming programme.

***Action 8: The IAEA, in consultation with ILO and drawing on the experience of trade unions and other stakeholder organizations, to prepare and disseminate suitable information materials to workers' representatives and labour educators in order to promote a better informed workforce and better understanding generally among those concerned with exposure to radiation.***

### ***Presentation***

G. Sadagopan presented the status of action 8, whose objectives are to enable workers representatives to understand the basis and main procedures of radiological protection in order to answer to the "very first" questions from the workers when faced with ionising radiation. Since 2006, several consultancy meetings have been held. Their conclusion was that there is a need to develop a handbook answering a set of Frequently Asked Questions (FAQ). DVDs, reference links and illustrations should supplement it. G. Sadagopan presented a "zero" draft of the handbook to the Steering Committee for comments .

### ***Discussion***

The Steering Committee reviewed the objectives and target audience of that document. D. Wymer stated that, in his view, the target audience was mainly workers and their representatives who had no opportunities to go into the controlled (or even supervised) areas and therefore did not receive special training. This is very often the case in NORM industries such as scrapyards for example. C. Lefaire gave two other examples of such an audience: the representatives of the nurses from general hospital departments who receive patients from nuclear medicine departments or representatives of workers in

the shipbuilding facilities (or oil-pipe building companies) who are faced with NDT activity. The Steering Committee unanimously considered them as examples of the proper target for such material.

Several remarks were then provided by the Steering Committee concerning the contents, the structure and the format of the material:

- T. Zodiates specified that what was important was to provide the workers' representatives with information allowing the workers to check if the management was taking appropriate measures to protect them against ionising radiation risk. V. Holahan pointed out the need for ensuring coherence between the trade union and management messages.
- C. Lefaure and T. Zodiates insisted that more emphasis be put on the practical aspects allowing an answer to "what do I do to protect myself?". The document should propose a better balance between "the basis of radiological protection" and practical, behavioural aspects of radiological protection.
- J. V der Steen, B. Gregori, M. Perrin and M. Peres remarked that for the previously provided reasons, the title should not refer to training but to information; following the provision of such information and if needed, the workers should receive training. This material will, however, not be used for that.
- J. V der Steen and B. Gregori also pointed out that the language contained too much jargon and was not at all adapted to the target audience. It would be better to make use of "normal everyday language".

All these remarks were agreed by the Steering Committee.

The Steering Committee asked to receive a new amended electronic version of the document, which should be modified following its recommendations. G. Sadagopan then proposed that new version be provided within 12 months and that an interval of three months be allowed for the submission of comments. The end product should be made available within 18 months. These milestones were approved by the Steering Committee.

S. Niu reminded the meeting that trade unions should be first line contributors to the document. Therefore they should be involved in producing and reviewing it.

### ***Conclusions***

The SC reviewed the objectives and target audience of the document and asked that the title be modified (information and not training) and reemphasized the chapters concerning practical aspects of radiological protection.

The SC recommended that the trade unions be consulted and be asked to contribute to the new drafting of the document.

The Steering Committee considered the Action 8 as in progress.

The Steering Committee noted that the remaining activities were:

- to submit the redrafted training handbook with a clear indication of the objectives and target audience to the Steering Committee as per the Steering Committee recommendations;
- to make the new draft available within 12 months with the help of communication specialists in order to avoid using radiation protection "jargon";
- to request members of the Steering Committee to send written comments on the draft document within three months; and
- to make the final draft available within 18 months.

**Action 9: The IAEA, in consultation with professional medical bodies such as the International Society of Radiology, to critically examine existing postgraduate education and awareness-raising packages for medical professionals, including those now being produced by ICRP, to establish the need for the development of further material, to develop further material as necessary and to disseminate the material developed.**

### **Presentation**

M. Rehani presented what has been done for Action 9 to the Steering Committee, which is targeted to HP professionals in hospitals. He reminded the meeting that a critical examination of existing training packages was performed in 2001-2003, and that this led to the development, in cooperation with many other international organisations, (PAHO, ILO, ISR, IOFMP, ICRRT), of new training material (lectures and slides) for –“diagnostic and Interventional Radiology, -Radiation Protection in Radiotherapy, -Radiation Protection in Nuclear medicine”. These materials were already presented at the last Steering Committee meeting in 2006. Since then major activities have been devoted to the dissemination of that material, the provision of new materials, the organisation of training courses and identification of follow up actions. The three first documents were released on an IAEA website (<http://rpop.iaea.org>) on September 2006. They were also made available as CDs. Since then, three other documents on “radiation protection in cardiology”, “prevention of accidental exposure in radiotherapy” and “radiation protection for doctors using fluoroscopy” have been developed and made available on the web and as CDs.. Three more documents are still under development: radiation protection in digital imaging, radiation protection in paediatric radiology, and radiation protection in computed tomography.

As for dissemination, all these documents have been made available free of cost for downloading from the website or sent, as CDs, to anyone who requests it. Specific training courses have also been run. Since 2002, 45 regional and 35 national training courses have been organised by the Agency. They have reached all regions of the world and all types of expected audience (medical doctors from different specialities, medical physicists or radiographers). However, the total number of trained medical workers is very low as compared with the number of concerned stakeholders all over the world. That is the reason why the web and CDs have been used and why some follow-up actions have been made: for example after the training courses for cardiologists organised in Asia, a survey was undertaken to check the impact of the training courses and an Asian Network of Cardiologists in Radiation Protection was set up which has already produced two issues of a newsletter.

### **Discussion**

V. Holahan informed the Steering Committee that, in the U.S., NCRP report 93 has shown an important increase in medical exposure during recent years (+19% procedures per year), which must have an influence on occupational exposure in the medical sector. Therefore action 9 is very important. V. Holahan requested more details concerning the efficiency of the dissemination of the material. M. Peres emphasised the fact that the evolution of patient and occupational exposures are connected. C. Martin pointed out the divergence between the above-mentioned evolution in the US and the one in the UK, showing an opposite trend. C. Martin also congratulated the Agency for the quality of “very useful” material and for the number of training courses around the world, allowing for a good dissemination of information.

M. Rehani, confirmed that, at least for the participants of the training courses, the feedback surveys' results show important and positive behaviour modification. However the direct impact of the courses is low, and even the envisaged train- the-trainers' policy has had little impact. That was the reason for developing the website and the CDs. M. Rehani also indicated that the Agency has given the right to all professional societies and all conference organisers to advertise and distribute for free the training material. Following a request from C. Lefaure, M. Rehani indicated that the average monthly number of visitors on the training page of the website is around 500 per month.

### ***Conclusions***

The Steering Committee congratulated the Agency for the quality of the material developed for the health professionals in hospitals. The Steering Committee approved the actual dissemination policy of the training packages: advertisement on the IAEA website, direct dispatch to all enquirers and distribution through professional societies or conference organisers. The Steering Committee also noted that many regional and national training courses have been organised or supported all over the world. Finally the Steering Committee supported all future possibilities such as networks, newsletters for increasing the dissemination of the training material.

The Steering Committee considered that all planned activities for Action 9 were completed.

***Action 10: The IAEA, together with other co-sponsoring organizations, to engage with WHO in establishing the status of the draft Manual, and to encourage its finalization, publication and use as soon as possible.***

### ***Presentation***

M Rehani indicated that since the last Steering Committee meeting, the five volumes of the manuals on Radiation Protection (namely: general, radiology, dentistry, nuclear medicine, radiotherapy) have not been published. They are now behind schedule. Volume 1 is nearly finished; volume 2 on radiology and volume 3 on dentistry need updating in view of the revised ICRP recommendations, volume 4 on nuclear medicine is at a fairly advanced stage and volume 5 on radiotherapy requires more work.

### ***Discussion***

The 5 volumes of the manuals on Radiation Protection were almost presented as "at a final state" during the previous Steering Committee meeting. Their publication was expected at the end of 2006. At that time, the main issue was the need to distribute the information to a larger spectrum of targeted people. Occupational exposure was to be considered as a priority and more practical examples were to be integrated into the material. A further review was proposed after the documents had been revised, part of which was to be done by M. Martin. Professional societies as well as the ALARA networks should have been made aware of the existence of such material and included in the consultation process, once the revision had been undertaken.

M Martin indicated that he had reviewed volume 2 "radiology" extensively and that the preliminary report in 2007 indicated that his comments had been integrated. However, he had not been sent a revised version to review. He felt that the manuals on radiation protection relating to occupational exposure in hospitals had not been given a high priority by the IAEA and that appropriate resources have not been allocated to that action.

## **Conclusions**

The Steering Committee took note that publication of the 5 radiation protection manuals has been delayed and that they were still in the process of being updated.

The Steering Committee considered Action 10 as in progress.

The Steering Committee recommended that the IAEA to provide appropriate resources for updating the 5 manuals as soon as possible taking into account the last ICRP recommendations.

***Action 11: In support of its programme on exposure to natural radiation, the IAEA to assist authorities in identifying activities involving exposure to natural radiation that may need to be controlled, and to generate and disseminate additional sector-specific information on radioactivity levels, exposure conditions, and chemical and physical characteristics of airborne pollutants in workplaces involving naturally occurring radioactive material.***

## **Presentation**

D. Wymer presented the activities implemented by the Agency within the scope of Action 11. The first part (assisting regulatory bodies in identifying...) gave rise, after a few consultancy meetings, to the issuing in 2006 of the Safety Report N°49 (Assessing the Need for Radiation Protection Measures in Work Involving Minerals and Raw Materials).

As for the second part of the action, D. Wymer presented some assessments of worker doses in each of the 12 industries most concerned. Besides exposure from radon in mines, it may be concluded that most "significant" exposure comes from concentrating nuclides in smelting processes. In all but five industries, exposure is far below 1 mSv; mainly due to industrial hygiene measures. Therefore five industry-specific documents have been planned, two of them are already issued concerning the oil and gas industry respectively (Safety Report N° 34 in 2003) and Zircon and Zirconia Industries (Safety Report N° 51 in 2007). Three other industry-specific reports will be published soon, one for the Phosphate industry, one for the Titanium dioxide industry and the last one for the production of rare earths from thorium-containing minerals. D. Wymer asked the Steering Committee for advice concerning the need for a Safety Report for the production and use of Thorium and its compounds.

The presentation also allowed D. Wymer to discuss the implications for natural sources of the revision of the BSS, to present the main results of the NORM V Symposium held in Seville in March 2007 and the EAN-NORM network workshop in Dresden in November 2007. D. Wymer informed the Steering Committee about the development of training packages for oil and gas industries (which have already been used at national, regional and interregional courses) and for NORM as a whole (nearly ready for pilot training courses). He indicated that additional modules for certain other industries (e.g. phosphate) would be developed.

## **Discussion.**

Following that very clear presentation, the Steering Committee members did not request more details about the activities of the Action 11; they did not request for an additional Safety Report on Thorium.

D. Wymer pointed out that the EC was in the process of revising its list of potentially concerned industries, and that a so-called positive list might be quite similar to the IAEA one.

Some discussion took place on the BSS revision.

S. Mundigl thanked D. Wymer for the information concerning the existence of the training packages. M. Perrin asked for details concerning the target audience of these training packages. D. Wymer answered that they were a priority for the regulatory bodies but also might be of use for other stakeholders.

### ***Conclusions***

The Steering Committee took note that the Safety Report 49 fulfils perfectly the requirement of assisting regulatory bodies in identifying NORM activities that may need to be controlled.

The Steering Committee took note that two industry-specific information documents are already available (Safety Report 34 for Oil and Gas industry and Safety Report 51 for Zircon and Zirconia). It also took note of the expected Safety Reports for the phosphate industry, titanium dioxide industry and rare earths industries. The Steering Committee considered that, with these publications, the main industries needing regulation and protection will be covered.

The Steering Committee considered the Action 11 as in progress.

The Steering Committee noted that the remaining activities are:

- the issuing of the last three industry-specific Safety Reports on the phosphate industry, the titanium dioxide industry and the rare earths industries at the end of 2008, beginning 2009.

***Action 12: The IAEA and ILO to collaborate in devising strategies for achieving a better understanding between radiation protection practitioners on one hand and occupational health and safety practitioners on the other and for developing coherent approaches to safety in the workplace.***

### ***Presentation***

As a first step to be undertaken, the ILO/ IAEA proposed to the setting up of a group of experts. They have prepared a joint proposal for the terms of reference for such a group of experts. P. Deboodt reminded the meeting of the objectives of the action: to favour co-operation between radiation protection and industrial safety practitioners in order to harmonise the international regulations and to facilitate a global managerial approach for the occupational risks. The role of the expert groups should be to collect basic material such as "Safety Cases" from sectors such as oil and gas industry or mining, where one can find risk assessment and management examples for both radiological and non-radiological issues. P. Deboodt reminded the meeting that during the last Steering Committee meeting it was stressed that such an holistic approach should be adapted differently in developed versus developing countries, and that the ALARA principle has appeared as a potential driving force for the holistic approach. Finally the ILO/IAEA consider that such a group should involve workers and employers. After his presentation, P. Deboodt requested the Steering Committee for advice on the need to organise consultancy meetings and later on, a Technical Meeting.

### ***Discussion***

Several participants (T. Zodiates, V. Holahan and others) considered that both the objectives, the target groups and the end products of that action were not clear and justified more discussion.

*What is the context?*

S. Niu and M. Peres reminded the meeting that health physics specialists and other risks specialists do not often speak to each other. They noted that in most ILO documents or WHO-sponsored conferences, radiological risk is totally invisible.

*What are the objectives of developing an holistic approach?*

S. Niu and J. V der Steen pointed out that there were many situations presenting several risks including the radiological one to be managed in the above-mentioned context. Therefore it was very important to try avoiding duplication of efforts or even contradictions both at the regulatory and practical levels. C. Lefaire and M. Peres stressed that it was necessary to reach a coherent approach in learning from each other (cross-fertilisation); this should have an impact on behaviours, organisations, resources allocation and eventually regulations at national or even international levels. Finally there is a need for advice on how to reach such harmonised situations. All intervening participants stressed the importance of co-operation and good interfaces between the international organisations, the different national regulatory bodies dealing with different types of risks, the different risk management specialists... H. Kharita pointed out that the negative output of the holistic approach should also be addressed by the Experts to have a global view. M. L. Joshi raised the point that the holistic approach is universal and that there should not be one for developed and another for developing countries.

*What are the major concerned sectors?*

D. Wymer and K. Landfermann indicated that, generally speaking, the NORM industries would be areas of great concern, often with chemical risks, inhalation of dust (etc...) and radiological risks.

M. Perrin and M. Peres pointed out the importance of including the medical and research sectors where many risks such as biological, infectious, nosocomial and radiological are faced together.

C. Martin specified that medical activities have often first to be justified. S. Niu answered that, even at the justification level, an holistic approach is needed.

*What should be the end products?*

T. Zodiates ask for clarification concerning the end product: one document, several documents, a technical meeting, a symposium, and some training material? P. Deboodt and S. Niu indicated that it would be the role of the Expert Group to decide the exact type of expected end product. Clearly it will have to be useful, whatever the form it will take, in order to make available some guidance on how to best achieve the cross fertilisation and finally the coherent regulatory and managerial approaches.

*To whom should be addressed the guidance?*

S. Mundigl raised this question. P. Deboodt and S. Niu answered that both regulatory bodies, the workers and the managers should be the targeted audience.

*What specialities should be represented in the Expert Group?*

After discussion it was agreed that the fields of competence for the experts should cover: radiological protection, industrial hygiene, occupational physicians, and infectious risk specialists. They should belong to trade unions, management and regulatory bodies.

*What should be implemented as a first step?*

Following a suggestion from T. Zodiates, it was agreed that before starting the group of experts meetings, it would be worthwhile performing a review of the literature concerning the subject. S. Niu suggested reviewing the ILO publications on the topics as well as the proceedings from the Antwerp and Prague EAN Workshops. D. Wymer mentioned some presentations from the EAN-NORM

Network workshop at Dresden. P. Tattersall indicated that the HPA has issued a report in 2007 on how the regulations are set up in Health Physics and other hazards (for example chemical). B. Ahier informed the meeting that an NEA working group was already working on the holistic approach topics and was collecting case studies. B. Ahier suggested that collaboration between both groups would be worthwhile.

### **Conclusions**

The Steering Committee agreed with the terms of reference, jointly proposed by the IAEA and ILO, subject to the modifications discussed during the meeting.

The Steering Committee supported the setting up of meetings with the involvement of experts to discuss the topic, to decide about the end products and target audience (regulatory bodies from different concerned departments - such as radiation protection, industrial hygiene, labour department and other stakeholders).

The Steering Committee considered that the group of experts should not focus only on industries, including NORM industries, but also address exposure to occupational risks in the medical and research sectors.

The Steering Committee considered Action 12 as in progress.

The Steering Committee noted that the remaining activities were:

- to propose ASAP more precise terms and conditions for a group of experts;
- to perform a literature study, survey and summary as an input for the Group of Experts beginning of 2008;
- to organise group of experts meeting(s) in 2008 and following years; and
- to collaborate with NEA working group on the topic.

***Action 13: The IAEA to review current information on the issue of standards for the protection of pregnant workers and their embryos and foetuses in order to determine whether the issue warrants action at the international level. In addition to the work described in the presentations made at the Geneva Conference, relevant work has been done in a number of countries and by a number of bodies (such as ICRP)***

### **Presentation**

R. Cruz Suarez reminded the meeting of the premises of this action: the Geneva Conference in 2002 pointed out that in the case of certain radionuclides, some possible exposure routes for pregnant workers and their embryos and foetuses might not have been properly identified and that there might be a need for further international guidance on the formulation and application of standards for their protection. R. Cruz Suarez also reminded participants that, after a review of all the existing standards, it appeared that the recommendations provided in the BSS are in general agreement with the international consensus on approaches to the protection of the pregnant or potentially pregnant workers. However it was stressed that there were still a number of issues, which required clarification



such as dose before the pregnancy, dose to the foetus due to intake by the mother, dose to the newborn, time scale for applying the dose limit. Therefore it was considered that more specific guidance was needed. That is the reason why the Steering Committee recommended during its last meeting that a technical document be prepared clarifying how to implement the recommendations of the BSS and to give guidance on how to protect female workers and their offspring. That document has been prepared and presented as working material to both the ICRP and BSS. The issuance of a questionnaire was also recommended by the Steering Committee. A first questionnaire that seeks information from Member States regarding their practices with radioactive sources, external and internal exposures and the involvement of male / female workers, have been issued and sent to some Member States. The number of answers received has been very few; therefore a simplified questionnaire has been produced and sent; the number of answers is increasing. The Agency has now to analyse the answers. A third recommendation from the Second Steering Committee meeting was to organise a technical meeting for advertising the guidance. That technical meeting was held in October 2007. Finally the Steering Committee recommended, also in 2006, the issuance of the guidance through the format of a Safety Guide. In order to prompt the process, R. Cruz Suarez requested the advice of the Steering Committee on replacing the Safety Guide by a Safety Report.

### ***Discussion***

T. Zodiates and H. Kharita asked if the problem of the pregnant worker corresponded to important stakes in terms of actual practices. S. Niu answered affirmatively and therefore a quick publication is needed. D. Wymer informed the Steering Committee that a Safety Guide makes recommendations, while a Safety Report only provides information, therefore the Guide has to follow a more formal procedure, which takes time. Following that explanation, M. Perrin was in favour of a Safety Guide that will be presented at RASSC, which is a good way for advertising the importance of the problem among the different countries. D. Wymer, Jan V. der Steen and M. Peres were also in favour of a Safety Guide, but as the publication procedures will take time, they insisted on an interim publication of the existing document as a TECDOC. Finally the Steering Committee re-emphasised its 2006 recommendation: the document should be published as a Safety Guide rather than a safety Report, but a TECDOC should be issued beforehand.

### ***Conclusions***

The Steering Committee congratulated the Agency for its excellent work. The Steering Committee noted that working material has been issued and that a technical meeting was held in 2007. The Steering Committee is expecting the results of the analysis of the answers to the simplified questionnaire. The Steering Committee supported the quick provision of the guidance via a TEC DOC. The Steering Committee recommended the publication later on of the material in a Safety Guide rather than in a Safety Report.

The Steering Committee considered the planned activities of Action 13 as completed but with some follow up actions consisting of:

- the issuance of a TECDOC in 2009; and
- the publication of the material in a Safety Guide after the launching of the new BSS.

***Action 14: The IAEA, in collaboration with ILO, WHO, NEA and other relevant bodies and drawing on the experience of other stakeholders, to continue its work on developing international guidance for aiding decision-making on the attribution of cases of detrimental health effects to occupational exposure to ionizing radiation.***

### ***Presentation***

M. R. Peres reminded the participants that the first Steering Committee meeting defined the scope and output of Action 14 and took note of the draft document providing information on a few systems of attributability prepared by a consultancy meeting. The second Steering Committee meeting decided that a Technical Meeting should be organized to complete the existing material and decided what to do with it to assist decision-making in compensating workers.

Since then, a Technical Meeting has been organized by WHO (Bad Münstereifel, 2006), which allowed the completion of the document with other examples, and three editorial meetings with the IAEA, ILO, and WHO have taken place at Geneva, (2006 - 2007). The document is now finalized (but for the foreword) and will be issued by the ILO. The document will neither replace any existing national compensation schemes for occupational diseases including cancer, nor propose a universal model for countries where such compensation schemes do not exist. The document considers occupational exposure to ionizing radiation as defined in the current BSS. The document specifically addresses health effects in workers. The document is targeted at the Competent Authorities, employers, workers, and persons in charge of compensation programmes. Its aim is to facilitate comparison and exchanges between countries that have already implemented compensation schemes, or to facilitate the development of national approaches in the other countries.

### ***Discussion***

M. Perrin stressed that it was important to remember that the examples in the document are just examples, and that the document does not intend to be exhaustive. S. Niu stated that the document would only provide guidance and not introduce any obligation. H. Kharita requested that the members of the Steering Committee be provided with the document as soon as possible. Following a question from C. Lefaure, M. R. Peres confirmed that it was not planned to revise the document in the near future.

### ***Conclusions***

The Steering Committee noted that a document had been prepared presenting the scientific basis for attributable risk and some examples of existing approaches which have been introduced into national schemes for compensation and that the expected activities have progressed, in particular with a technical meeting organised in Germany in 2006 by WHO. The Steering Committee noted that the ILO/IAEA/WHO document will be issued in 2008. The Steering Committee congratulated the three international organisations.

The Steering Committee considered the planned activities of Action 14 as completed but with follow-up actions, which will consist of:

- the issuance of the document by ILO in 2008 as a Guiding Material; and
- the dissemination of the document.

## **A.3. Future of the Action Plan**

P. Deboodt introduced the final discussion with one question “ *Taking note of the situation of the all previously assessed actions, what should be the future of the Action plan itself?*”

### **A.3.1. Discussion**

A wide-ranging discussion took place on the wording concerning the status of each action. It was stated that closing an action did not mean it is totally finished. It means that the planned activities have been performed and, in particular, that procedures for sustainability have been set up which will allow follow-up activities and, when needed, cooperation to continue on a regular basis. Considering the number of actions in the Action Plan which have been completed, it was suggested by several participants to close the Action Plan and to think about proposing another Action Plan incorporating the five actions still in progress with new actions to be defined. That solution was not selected due to the fact that a large majority of actions still had follow up actions or needed regular follow-up.

### **A.3.2. Conclusions for the Action Plan**

The activities of four actions, namely Actions 1, 2, 4, 9 were considered as completed and their output integrated into the regular activities of the Agencies. The activities of five actions, namely Actions 3, 5, 6, 13, 14 were considered as completed but with a need for implementing specific follow-up actions. Five actions, namely Actions 7, 8, 10, 11, 12 were considered as still in progress. In view of this situation, the Steering Committee decided that the Action Plan should continue for another period of one or two years allowing the pending actions to be completed (see Appendix 5).

Therefore the Steering Committee will continue its role. The Steering Committee asked for a progress report by the beginning of 2009 and for a new meeting which should be planned between one and two years depending on the status of the actions in progress. The role of that meeting should be the closure of the Action Plan.

### **A.3.3. Recommendations on future concerns**

A large round table allowed participants to point out some new topics of interest in the area of occupational exposures. This led to the following recommendations to the International Organisations:

- -to take care of new technologies' possible impacts on occupational exposure in the medical sector
- to take care of the impacts of increasing lack of skilled workers on occupational exposure trends and remedial actions to be implemented (training new generations, itinerant workers, dose passport....)
- to work on radiation protection criteria for workers in existing situations (after an accident)
- -to be aware of new scientific developments and check regularly their potential impacts on occupational exposures (eyes lens effects, individual radio sensitivity, male versus female radio sensitivity, radon, cardiovascular diseases...)

## APPENDIX 1: List of participants

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APPENDIX 2: The Radiation Safety and Monitoring Section



## APPENDIX 3: Agenda of the Third Meeting

**Monday, 28 January**

09.00 – 09.30: Registration

09.30 – 09.45: Welcome address (IAEA – ILO)

09.45 – 10.00: Administrative issues (IAEA Sec)

10.00 – 10.30: Introduction of the participants  
 Approval of the meeting agenda  
 Approval of the report of the 2<sup>nd</sup> meeting

10.30 – 11.00: Tea/Coffee Break

11.00 – 12.30: Session 1: Status of Actions 1 to 4

**Action 1:** *ILO, supported by the IAEA, to take steps to further promote the ratification and implementation of ILO Convention 115 (S.NIU)*

**Action 2:** *ILO to consider whether there is a need to review the procedures for requesting from Member States information on the implementation of ILO Convention 115 and to review the types of information being requested, so that peer reviews of occupational radiation protection programmes become more effective. Lessons learned from the application of the reporting criteria applied under the Convention on Nuclear Safety (IAEA document INFCIRC/449) may be a useful input. (S.NIU)*

**Action 3:** *The IAEA and ILO to continue to cooperate in the development of guidance and information material that will assist in the interpretation of requirements set out in conventions and standards, and in the conduct of further IAEA intercomparison of monitoring methods for assessing occupational exposure (S.NIU – P.DEBOODT)*

**Action 4:** *ILO, in consultation with the IAEA, to consider the concerns over the terminology used in the code of practice and determine the most appropriate means of addressing them. (S.NIU)*

Open discussion

12.30 – 14.00: Lunch Break

14.00 – 15.30: Session 2: Status of Actions 5 to 8

**Action 5:** *ILO to make the list of contact points in its Member States and field structure available to the IAEA, which should inform the contact points about the latest available standards, guidance and advice developed at the international level and invite their representatives to relevant workshops, seminars and conferences. (S.NIU)*

**Action 6:** *The IAEA, in consultation with ILO, to develop publicity materials in the form of posters and leaflets that target groups of workers identified as likely to benefit directly from the information provided — for example, workplace material designed to reduce the number of near misses and the risk of serious accidents (G.SADAGOPAN)*

**Action 7:** *The IAEA to provide a focal point, on a website, where networks may be established for exchanges of information, experience and lessons learned between interested parties (P.DEBOODT)*

**Action 8:** *The IAEA, in consultation with ILO and drawing on the experience of trade unions and other stakeholder organizations, to prepare and disseminate suitable information materials to workers' representatives and labour educators in order to promote a better informed workforce and better understanding generally among those concerned with exposure to radiation(G.SADAGOPAN)*

Open discussion

15.30 – 16.00: Tea/Coffee Break

16.00 – 17.30: Session 3: Status of Actions 09 to 12

**Action 9:** *The IAEA, in consultation with professional medical bodies such as the International Society of Radiology, to critically examine existing postgraduate education and awareness-raising packages for medical professionals, including those now being produced by ICRP, to establish the need for the development of further material, to develop further material as necessary and to disseminate the material developed.(M.REHANI)*

**Action 10:** *The IAEA, together with other co-sponsoring organizations, to engage with WHO in establishing the status of the draft Manual, and to encourage its finalization, publication and use as soon as possible.(M.REHANI)*

**Action 11:** *In support of this programme [on exposure to natural radiation], the IAEA to assist authorities in identifying activities involving exposure to natural radiation that may need to be controlled, and to generate and disseminate additional sector-specific information on radioactivity levels, exposure conditions, and chemical and physical characteristics of airborne pollutants in workplaces involving naturally occurring radioactive material.(D.WYMER)*

**Action 12:** *The IAEA and ILO to collaborate in devising strategies for achieving a better understanding between radiation protection practitioners on one hand and occupational health and safety practitioners on the other and for developing coherent approaches to safety in the workplace.(P.DEBOODT – S.NIU)*

Open discussion

17.30: End of the day

19.00: Social event

**Tuesday, 29 January**

09.00 – 10.30: Session 4: Status of Actions 13 and 14

**Action 13:** *The IAEA to review current information on this issue [standards for the protection of pregnant workers and their embryos and foetuses] in order to determine whether the issue warrants action at the international level. In addition to the work described in the presentations made at the Geneva Conference, relevant work has been done in a number of countries and by a number of bodies (such as ICRP)(R.CRUIZ SUAREZ)*

**Action 14:** *The IAEA, in collaboration with ILO, WHO, NEA and other relevant bodies and drawing on the experience of other stakeholders, to continue its work on developing international guidance for aiding decision-making on the attribution of cases of detrimental health effects to occupational exposure to ionizing radiation (WHO representative).*

Open discussion

10.30 – 11.00: Tea/Coffee Break

11.00 – 11.30: Present status of the BSS Revision process

11.30 – 12.30: Update of the IAPORP work plan 2008-2009

12.30 – 14.00: Lunch Break

14.00 – 15.30: Summary of the presentations and discussions –

15.30 – 16.00: Tea/Coffee Break

16.00 – 17.30: Perspectives for the IAPORP: Open discussion

***Wednesday, 30 January***

09.00 – 10.30: Main conclusions of the meeting – Next meeting

10.30 – 11.00: Tea/Coffee Break

11.00 – 11.30: Closing address

APPENDIX 4

**List of countries having provided ILO with reports including information on Convention 115 implementation**

**in 2005**

Czech Republic,

Djibouti,

Ecuador,

France,

French Guiana (France),

French Polynesia (France),

Germany, Ghana, Guinea, India, Iraq, Japan, Lebanon, Martinique (France), Norway, Paraguay, Réunion (France), Sweden, United Kingdom, Uruguay

**in 2006**

Barbados,

Brazil,

Djibouti,

French Polynesia (France),

Ghana,

Guadeloupe (France),

Guinea,

Iraq,

Paraguay,

Spain





APPENDIX 5			
<b>Action</b>	<b>Steering Committee (SC) conclusions and recommendations</b>	<b>Action status</b>	<b>Remaining activities or Follow up actions</b>
<b>Action 1</b>  <b>To promote the ratification and implementation of ILO Convention 115</b>	<p>The Steering Committee notes that ILO has provided ad hoc information to the Agency allowing the systematic promotion of the ratification and implementation of ILO Convention 115 and recommendation 114 during “technical” regional meetings and appraisals such as ORPAS.</p>	<b>Planned activities completed</b>	Promotion to be unceasingly continued by IAEA in technical regional meetings and further developed through other activities under the Thematic Safety Area 2 on occupational radiation protection.
<b>Action 2</b>  <b>To review the procedures for getting information from MS on the ILO Convention 115 implementation</b>	<p>The Steering Committee notes that the ILO has considered the procedures for requesting information from its Member States on implementation of Convention 115 and that the Agency has provided support to that by establishing a review programme.</p>	<b>Planned activities completed</b>	
<b>Action 3</b>  <b>To develop guidance /information material (about requirements, inter-comparison of monitoring methods,)</b>	<p>The Steering Committee notes that the ILO, IAEA and other international organisations are collaborating in the revision of the BSS, which is intended to continue as a joint publication.</p> <p>The Steering Committee supports the ILO in cooperation with IAEA to jointly prepare guidance and information material to assist in the interpretation of the convention 115.</p> <p>The Steering Committee notes that some inter-comparisons are now finished and that others related to</p>	<b>Planned activities completed, but with follow up actions</b>	<b>Follow up actions:</b>  - New inter-comparisons related to measurements and monitoring technique to be implemented within current and next cycles

	measurements and monitoring techniques are included in Technical Cooperation projects for the current and next cycles.		
<b>Action 4</b> <b>Terminology used in ILO Code of Practice and means to addressing it</b>	The Steering Committee notes that the ILO has reviewed the Code of Practice. The Steering Committee notes that the problem of harmonising terminology has been addressed jointly with IAEA as a result of the collaboration in revising the BSS.	<b>Planned activities completed</b>	



<p><b>Action 5</b></p> <p><b>To establish a database with contacts-points in the Agency MSs and information</b></p>	<p>The Steering Committee notes that a database with the national contact points from the Agency, from the ILO and from the WHO has been set up by the Agency with the help of ILO and WHO. The Steering Committee also notes that no use has been made of these files.</p>	<p><b>Planned activities completed but with follow up actions</b></p>	<p><b>Follow up actions:</b></p> <p>To establish routine mechanisms for:</p> <ul style="list-style-type: none"> <li>- informing all contact points about their counterparts</li> <li>- taking advantage of regional coordination meetings and other regional and international activities (for example, network workshops, international conference...) for associating representatives of all three organisations.</li> <li>- developing common activities.</li> <li>- promoting Convention 115</li> <li>- regularly updating the contact points database</li> </ul> <p>...</p>
<p><b>Action 6</b></p> <p><b>To develop publicity material/leaflets for the targeted groups of workers</b></p>	<p>The Steering Committee notes that the final draft of the posters is now available. The Steering Committee congratulates the Agency for the excellent product. The Steering Committee takes note of the proposed dissemination procedure among all contact points making use of electronic files available on the web site. The Steering Committee recommends complementary channels such as national and international professional societies as well as ALARA networks. The Steering Committee recommends translation into at least all the official languages of the Agency. The Steering</p>	<p><b>Planned activities completed but with follow up actions</b></p>	<p><b>Follow up actions:</b></p> <ul style="list-style-type: none"> <li>- To finalise the posters</li> <li>- To provide them also in a leaflet or brochure form</li> <li>- To ask for endorsement by stakeholders such as trade unions</li> <li>- To make it available as pdf in the six official languages</li> </ul>

	Committee recommends allowing regulatory bodies or professional societies to translate the material into other languages.		
<b>Action 7</b>  <b>To provide a focal point for exchange of information through networking</b>	<p>The Steering Committee notes the positive feedback from the RECAN network and the setting up of the ARAN network, both supported by the Agency. The Steering Committee notes that several other regions are expecting the setting up of such networks (French and English speaking African countries, Middle East countries, Latin American countries). The Steering Committee recommends that the Agency support the setting up of such regional networks as soon as possible through Technical Cooperation and Regional Cooperation Agreements.</p> <p>The Steering Committee supports the setting up and management by the Agency of a website to provide a focal point for all existing networks concerned with occupational exposure.</p>	<b>In Progress</b>	<p><b>Remaining activities</b></p> <ul style="list-style-type: none"> <li>- Setting up of a website</li> <li>- Introduction of the future networks into the next 2009-2011 Agency Programme.</li> <li>- Follow up of the Agency support to the existing two networks during that programme.</li> </ul>

<p><b>Action 8</b></p> <p><b>To prepare and disseminate information material to the workers representatives</b></p>	<p>The Steering Committee has reviewed the objectives and target audience of that document and in that view asks that the title be modified (information and not formation...) and reemphasizing the chapters concerning practical aspects of radiological protection. The Steering Committee recommends that the trade unions be consulted and that they contribute to the new drafting of the document.</p>	<p><b>In progress</b></p>	<p><b>Remaining activities</b></p> <ul style="list-style-type: none"> <li>- A draft document with clear reminding of the objectives and target audience to be send to Steering Committee members when rewritten</li> <li>- That new draft will be made available within 12 months with the help of communication specialists in order to avoid radiation protection “jargon”.</li> <li>- The members of the Steering Committee to send written comments on the draft document within three months.</li> <li>- A final draft to be available within 18 months</li> </ul>
<p><b>Action 9</b></p> <p><b>Postgraduate education for/with professional medical bodies</b></p>	<p>The Steering Committee congratulates the Agency for the quality of the material developed for the health professionals in hospitals. The Steering Committee approves the actual dissemination policy of the training packages: advertisement on the IAEA website, direct dispatch on request, distribution through professional societies or conference organisers. The Steering Committee also notes that many regional and national training courses have been organised or supported all over the world. Finally the Steering Committee supports all future possibilities such as networks,</p>	<p><b>Planned activities completed</b></p>	

	newsletters etc to increase the dissemination of the training material.		
<b>Action 10</b> <b>Draft Manual on RP in Hospitals and in General Practice: status and publication</b>	The Steering Committee takes note that the issuance of the five radiation protection manuals has been delayed and that they are still in the updating progress. The Steering Committee recommends that the IAEA to provide appropriate resources for updating the five manuals as soon as possible taking into account the last ICRP recommendations.	<b>In progress</b>	<b>Remaining activities</b>  - To update the five manuals ASAP.
<b>Action 11</b> <b>Activities involving exposure to natural radiation</b>	The Steering Committee takes note that the Safety Report 49 fulfils perfectly the requirement of assisting regulatory bodies in identifying NORM activities that may need to be controlled. The Steering Committee takes note that two industry-specific reports are already available (Safety Report 34 for the Oil and Gas industry and Safety Report 51 for Zircon and Zirconia). It also takes note of the expected Reports for Phosphate Industry, Titanium Dioxide Industry and Rare Earths Industries. The Steering Committee considers that, with these publications, the main industries needing regulation and protection will be covered.	<b>In progress</b>	<b>Remaining activities</b>  Issuance of the last three industry specific Safety Reports on Phosphate Industry, Titanium Dioxide Industry and Rare Earths Industries before ..... date.
<b>Action 12</b> <b>Holistic approach of ORP</b>	The Steering Committee agrees with the terms of reference, jointly proposed by the IAEA and ILO, subject to the modifications discussed during the meeting. The Steering Committee supports the setting up of meetings with the involvement of experts \ to discuss the topic, to decide about the end products and target	<b>In progress</b>	<b>Remaining activities</b>  - To propose ASAP more precise terms and conditions for a group of experts - To perform a literature study, survey and summary as an input

	<p>audience (regulatory bodies from different concerned departments - such as radiation protection, industrial hygiene, labour department and others stakeholders). The Steering Committee considers that the group of experts should not focus only on industries, including NORM industries, but also address exposure to occupational risks in the medical and research sectors.</p>		<p>for the Group of Experts beginning of 2008 - To organise group of experts meeting(s) in 2008 and following years</p>
<p><b>Action 13</b></p> <p><b>Protection of pregnant workers and foetus</b></p>	<p>The Steering Committee congratulates the Agency for its excellent work. The Steering Committee notes that working material has been issued and that a technical meeting was held in 2007. The Steering Committee is expecting the results of the analysis of the answers to the simplified questionnaire. The Steering Committee supports the quick provision of the guidance via a TEC DOC. The Steering Committee recommends the publication later on of the material in a Safety Guide rather than in a Safety Report.</p>	<p><b>Planned activities completed, but with follow up actions</b></p>	<p><b>Follow up actions</b></p> <ul style="list-style-type: none"> <li>- Issuing of a TECDOC in 2009.</li> <li>- Publishing the material in a Safety Guide after the issuing of the new BSS</li> </ul>
<p><b>Action 14</b></p> <p><b>Probability of causation of detrimental effects due to occupational exposure to ionizing radiation</b></p>	<p>The Steering Committee notes that a document has been prepared presenting the scientific basis for attributable risk and some examples of existing approaches which have been introduced into national schemes for compensation and that the expected activities have progressed, in particular with a technical meeting organised in Germany in 2006 by WHO. The Steering Committee notes that the ILO/IAEA/WHO document will be issued in 2008. The Steering Committee congratulates the three international organisations.</p>	<p><b>Planned activities completed, but with follow up actions</b></p>	<p><b>Follow up actions</b></p> <ul style="list-style-type: none"> <li>- Issuing of the document by ILO in 2008 as a Guiding Material</li> <li>- Dissemination of the document</li> </ul>